REMARKS

Claims 1, 3-10, and 12-19 are active in the application. The limitations of claims 2 and 11 have been incorporated into independent claims 1 and 8, respectively, and claims 2 and 11 have been cancelled. These amendments to the claims render claims 1 and 8 substantially equivalent to dependent claims 2 and 11 previously of record in the application. As will be discussed in detail below, the amendment of claims 1 and 8 place the claims in prima facie condition for allowance, therefore, reconsideration and allowance of all pending claims at an early date is requested.

Claims 1-5 and 8-12 and 16-19 were rejected under 35 USC 103(a) as being unpatentable over US Patent 6,557,027 to Cragun in view of US Patent 6,104,989 to Kanevsky et al. These rejections are traversed.

All the claims now require time stamping of messages and using the time stamp to determine topical relationships between different messages (i.e. whether messages are topically related or not). None of the cited prior art references, either alone or in combination, teach or suggest this aspect of the present invention.

The present invention provides a method and system for conducting messaging sessions in which an automated topic separator separates messages or parts of messages according to topic. The automated topic separator does not rely on user-specified topic separation. Since the topic identification and separation is provided automatically, users in a messaging session are free to converse naturally and without interruption. Users of the present system do not have to stop to organize message threads according to topic, or to identify for the computer messages that belong to particular topics.

Additionally, in the present invention, the topic separator utilizes information from the time synchronizer (i.e. the time stamp) to determine the topical relationship between messages. In other words, the topic separator uses the time stamp on messages (in combination with message word content) to determine which messages share a common topic, and which do not. Timing information helps the topic separator remove ambiguity when the topic of a message is not clear. This requirement of the invention has been added to the independent claims 1 and 8. This aspect of the invention is described in the present specification at page 6, lines 6-16 and page 3, line 20-page 4, line 5. The type

of ambiguity that can be resolved with timing information according to the present invention is described at page 2, lines 4-17.

With respect to claim 2, now incorporated into claim 1, the Office Action properly acknowledges that Cragun does not teach the use of time stamps to determine topical relationships between messages. However, the Office Action erroneously argues that Kanevsky et al. teach that a time synchronizer (i.e. time stamps) can be used to determine topical relationships between messages. This is wrong; Kanevsky et al. does not teach the use of time stamps or a time synchronizer for use in determining topical relationships between messages.

Specifically, the Office Action identifies Col. 4, lines 53-54 of Kanevsky et al. as teaching topic separation based on the timing of messages. This is incorrect. Col. 4, lines 53-54 actually teach that the timing of a topic change can be detected and stored. In other words, a "time stamp" may be given for the time of the change in topic. This is different from time stamps for indicating the time of individual messages, and using the time stamps to determine topical relationships between messages (e.g. detecting a topic change), as required in claim 2. Specifically, col. 4, lines 53-54 of Kanevsky et al. state: "Once the change [in topic] is detected, establish the time of onset of the new topic...". So, in this section, Kanevsky et al. teach that the time of a change in topic is detected. Kanevsky et al. does not teach or suggest time stamping of messages, and does not teach or suggest using time stamps of messages to determine topical relationships between messages.

In Kanevsky et al., the change in topic is not determined by time stamps of messages. Instead, the change in topic is determined by mathematical techniques based on change point detection methods and the frequencies of certain key words as compared to pre-analyzed training data (see col. 3, lines 38-55, col. 4, lines 40-46, col. 7, lines 45-67, and col. 9 lines 50-65). Nowhere do Kanevsky et al. teach or suggest that time stamps of messages can be used to determine topical relationships between messages (e.g. such as identifying topic changes). Kanevsky et al. do not teach this essential feature of claim 2, now incorporated into amended claim 1. Accordingly, the rejection of claim 1 must now be withdrawn.

Similarly, with respect to claim 11, now incorporated into claim 8, the Office Action properly acknowledges that Cragun does not teach automatically identifying a new topic. The Office Action argues that Cragun at col. 6, lines 48-50 teaches the use of a time stamp to "<u>determine whether the topic has changed or is a new topic</u>". This is wrong. At col. 6, lines 48-50 Cragun instead teaches that a "sub-topic post" can include a time stamp for each message. Completely absent from Cragun is any teaching or suggestion that a time stamp can be used to determine whether the topic has changed or is a new topic, as required by claim 11, now incorporated into claim 8. Cragun relies on users to explicitly specify topics and sub-topics; Cragun does not teach that the computer can determine whether a topic has changed or if a new topic is being discussed. Accordingly, the rejection of claim 8 as amended must be withdrawn.

Also, in the present invention, it is important to note that training data is not used. Training data is commonly employed in speech recognition, machine translation, and topic recognition. Training data is essential in Kanevsky et al. The training data of Kanevsky et al. comprises large blocks of text identified as to topic (see col. 10, lines 14-26). This training data is used to teach the software proper identification of words and topics so that accuracy is improved. A shortcoming of training data, when used for topic identification, is that it must be grouped according to a finite number or predetermined topics. This limitation is incompatible with the present invention, because the present invention is directed towards real-time messaging sessions in which any topic can be discussed. In the present messaging systems and methods, it is not possible to identify topics beforehand. Training data cannot be used with the present invention because it will be impossible to predetermine all the possible topics of the messages. By comparison, Kanevsky et al. requires training data and requires predetermination of topics. This training data must be grouped according to a finite number of predetermined topics, and analyzed before topic recognition is started.

Therefore, even if one creates the combination of Cragun and Kanevsky et al. as proposed in the Office Action, it would not be able to separate topics in a messaging system. This is because Kanevsky et al. requires training data (see col. 10, lines 14-26), and training data cannot in principle be provided unless the topics are known in advance.

Claims 1 and 8 are limited to messaging systems and methods that necessarily allow for the discussion of any topic. In messaging systems, training data cannot be used because the topics cannot be identified beforehand. Accordingly, the teachings of Kanevsky et al. cannot be applied to messaging systems and messaging methods as set forth by claims 1 and 8 and the rejections of these claims should be withdrawn for this additional reason.

Claims 7, 13, and 15 were rejected under 35 USC 103(a) as being unpatentable over Cragun in view of Kanevsky et al. and US Patent 6,016,476 to Maes et al. Claims 6 and 14 were rejected under 35 USC 103(a) as being unpatentable over Cragun in view of Kanevsky et al., Maes et al., and US patent application 2001/0028364 to Fredell et al. These rejections are traversed.

Maes does not make up for the deficiencies of Cragun and Kanevsky. Maes has been cited only for its relationship to biometrics. As such, claims 7, 13, and 15 cannot be obvious over a combination of Cragun, Kenevsky and Maes.

As noted in the prior response, Fredell does not teach or suggest user-user authentication and the Office Action arguments regarding Fredell are wrong. Fredell teaches computerized authentication, not user-user authentication.

Specifically, claims 6 and 14 require that the identity of a user of the present messaging system is authenticated by other users of the system. Specifically, claims 6 and 14 require that other users verify the answers provided by the user being authenticated. In this way, it becomes the choice of a user whether or not to accept the given authentication attempt of another user. Therefore, the user can determine the importance of proper authentication. This is described on page 10, lines 5-27 of the present specification. By comparison, Fredell et al. teach a very different concept. Fredell et al. in paragraph [0089] teach a method for storing and distributing contact information such as phone number, email , fax number and so on. Specifically, Fredell et al teach an "online user directory that is accessible to all project participants". In this way, all users can have access to the contact information of other participants. This is very different from the present invention as claimed in claims 6 and 14. Fredell et al. does teach security measures, but the security measures taught by Fredell et al. are conventional, well known methods employing passwords and the like for user identity verification. In

Fredell et al., the verification is performed by the computer (see paragraphs [0045], [0046], [0054], and [0056], and also claim 18 which teaches a "unique sign-on credential..."). Nowhere do Fredell et al. teach or suggest user-user authentication as required in claims 6 and 14, and therefore the rejections of these claims must be

5   withdrawn.

In view of the foregoing, it is respectfully requested that the application be reconsidered, that claims 1, 3-10, and 12-19 be allowed, and that the application be passed to issue.

Should the Examiner find the application to be other than in condition for

10   allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

A provisional petition is hereby made for any extension of time necessary for the continued pendency during the life of this application. Please charge any fees for such

15   provisional petition and any deficiencies in fees and credit any overpayment of fees for the petition or for entry of this amendment to IBM's Deposit Account No. 50-0510 (Whitham, Curtis & Christofferson P.C.).

20   Respectfully submitted,

                                                   Michael E. Whitham
                                                   Reg. No. 32,635

25   Whitham, Curtis, & Christofferson, P.C.
      11491 Sunset Hills Road, Suite 340
      Reston, VA, 20190
      Phone: 703-787-9400
      Fax: 703-787-7557
30

10/040,474 (00280715AA)